Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A spindle positioning apparatus for a robotic manipulator comprising:

a mounting plate assembly attached to the robotic manipulator, the mounting plate assembly having a fixed plate disposed proximate the robotic manipulator and a movable plate movably attached to the fixed plate;

a first spindle disposed on the fixed plate in a fixed position and having a first axis of rotation;

a second spindle disposed on the movable plate and movable with respect to the first spindle, the second spindle having a second axis of rotation; and

an actuator mechanism adapted to position the second spindle with respect to the first spindle;

wherein the first and second axes of rotation are disposed in a common plane that does not intersect a location where the mounting plate assembly is attached to the robotic manipulator.

2. (previously presented) The apparatus of claim 1 wherein the mounting plate assembly includes a linear slot and the movable plate includes a pin that extends into the linear slot to help guide movement of the movable plate.

3. (previously presented) The apparatus of claim 1 wherein the first spindle extends through the fixed plate and the second spindle extends through the movable plate.

4. (previously presented) The apparatus of claim 1 wherein the actuator mechanism is disposed on a first side of the mounting plate assembly and the robotic manipulator is disposed on a second side of the mounting plate assembly disposed opposite the first side.

5. (original) The apparatus of claim 4 wherein the actuator mechanism further comprises a ball screw assembly having a ball nut and a ball screw, and a servo motor adapted to rotate the ball screw to actuate the ball nut.

6. (original) The apparatus of claim 5 wherein the ball nut is attached to the movable plate and the ball screw is attached to the fixed plate.

7. (currently amended) The ~~assembly~~ apparatus of claim 1 wherein the first spindle has a first axis of rotation, the second spindle has a second axis of rotation, and a distance between the first and second axes of rotation is in the range of 75 mm to 1400 mm.

8. (original) The apparatus of claim 1 wherein the first spindle is adapted to rotate about a first axis of rotation, the second spindle is adapted to rotate about a second axis of rotation, and the first and second axes of rotation are disposed parallel each other.

9-14. (cancelled)

15. (withdrawn) A method for applying torque to a set of threaded parts with a spindle positioning apparatus disposed on a robotic manipulator, the spindle positioning apparatus including first and second spindle assemblies each adapted to engage a threaded part and having first and second axes of rotation, respectively, the second spindle assembly being movable with respect to the first spindle assembly, the method comprising:

selecting a subset of the set of threaded parts;

determining a center line distance between the threaded parts in the subset;

moving the second spindle assembly such that the first and second axes of rotation are separated by an amount equal to the center line distance;

positioning the spindle positioning apparatus with the robotic manipulator such that the first and second spindle assemblies are disposed proximate the subset of threaded parts;

rotating the first and second spindle assemblies to apply torque to the subset of threaded parts; and

repeating the selecting step for additional subsets of threaded parts until all of the threaded parts in the set are selected.

16. (withdrawn) The method of claim 15 wherein a first subset selected from the set of threaded parts is disposed proximate a center of a workpiece.

17. (withdrawn) The method of claim 16 wherein at least one part in the subset of threaded parts for a current iteration is spaced further from the center of the workpiece than a part in the subset of threaded parts selected for a prior iteration.

18. (withdrawn) The method of claim 16 wherein a last subset selected from the set of threaded parts includes a part disposed furthest from the center of the workpiece.

19. (withdrawn) The method of claim 15 wherein the threaded parts are threaded bolts and the workpiece is a cam cover.

20. (withdrawn) The method of claim 15 wherein the threaded parts are spark plugs and the workpiece is an engine.

21. (new) A spindle positioning apparatus for a robotic manipulator comprising:

a first mounting plate assembly attached to the robotic manipulator and having a first opening;

a second mounting plate assembly movably attached to the first mounting plate and having a second opening;

a first spindle extending through the first opening and attached to the first mounting plate assembly;

a second spindle extending through the second opening and attached to the second mounting plate assembly; and

an actuator mechanism configured to position the second spindle with respect to the first spindle.

22. (new) The apparatus of claim 21 further comprising a track disposed proximate the first mounting plate assembly and adapted to movably receive the second mounting plate assembly.

23. (new) The apparatus of claim 21 wherein the actuator mechanism further comprises a ball screw assembly having a ball nut and a ball screw, and a servo motor adapted to rotate the ball screw to actuate the ball nut, wherein the actuator mechanism is disposed on a bottom side of the first mounting plate assembly disposed opposite the robotic manipulator.

24. (new) The apparatus of claim 23 wherein the ball screw is attached to the first mounting plate assembly and the ball nut is attached to the second mounting plate assembly.

25. (new) The apparatus of claim 21 wherein the first mounting plate assembly includes a fixed plate attached to the robotic manipulator and an extension plate that extends from a side of the fixed plate, wherein the first opening is provided in the extension plate.

26. (new) The apparatus of claim 25 wherein the extension plate and the second mounting plate assembly extend from a common side of the fixed plate.